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MP250 ZOOM

Realized by PC CAD & VIDEO



- **Code 02E003 - MP250 Zoom**

- **OPERATING INSTRUCTIONS**



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1.0 HOW TO USE THE MANUAL

This manual has been organized in order support the user, the installer or the maintenance operator of the described unit with those necessary informations for a correct use of the installation and working procedures of the same unit. The various procedures will be just signalled by indicators (when necessary) evidencing the operation dangers and the necessity of technical support. Please find here below a list of symbols and relative meaning.



OPERATOR: Not particulary qualified staff, that can operate when no specific knowledge is required.



COEF OPERATOR Technical staff, qualified and trained by the constructor, for repair and extraordinary operations.



MECHANICAL OPERATORS Staff employed in the ordinary mechanical maintenance.



SPECIALIZED MECHANICAL OPERATOR: Qualified staff employed in extraordinary authorized installations and repairs.



ELECTRIC OPERATORS: Staff employed in the ordinary electric maintenance.



SPECIALIZED ELECTRIC OPERATORS: Qualified staff employed in extraordinary authorized installations and repairs.



DANGER SIGNAL Generic danger signal and electric shock danger signal.

1.1 TECHNICAL NOTES

MP250 Zoom

Code: 02E003

- MSD 250/2 lamp - 250 W - 2.000 hours life - 8.000 °k
- 540° PAN - 270° TILT
- 16 bit movement resolution
- PAN and TILT automatic repositioning
- 6 metal and 2 dichroic rotating gobos all interchangeable and indexable on 540°
- 10 additional metal gobos given with the projector
- 1 selectable beam reducer
- 10 colors + white + 8 bi-colors
- Rainbow effect adjustable in speed
- Black light filter
- Linear dimmer from 0% to 100%
- Mechanical shutter
- Adjustable strobe
- 4 Lenses optical system
- Linear zoom from 12° to 22°
- Focus adjustment
- Multifunctional display
- Remote reset via DMX, selectable from display
- Remote ON/OFF lamp via DMX, selectable from display
- Software Upgrade via DMX (UNI-PROG 8 optional available)
- Internal self-test with led indication
- Internal power factor correction - absorbed power 1,4 A.
- DMX 512 Standard
- 8/9 control channels

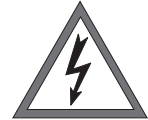
Power supply | Absorbed power

v~	Hz	I	W
100	50	4,3A	382
100	60	3,6A	361
120	50	3,6A	380
120	60	3,0A	359
200	50	2,2A	379
200	60	1,8A	359
230	50	1,7A	380
230	60	1,8A	385

2.0 INSTALLATION

The constructor is not to be considered responsible in the case of:

- improper use of the unit or use by not trained staff
- use in contrast with the directions on work safety
- wrong installation
- defective power supply
- serious lacks in the necessary maintenance
- unauthorized modifications and interventions
- use of spare parts that are not original or not specific for the unit
- total or partial inobservance of instructions
- Unusual events



2.1 LAMP MOUNTING AND REPLACING



The unit mounts high pressure lamp with external traditional striker.

The lamp must be changed if damaged or deformed by heat.

WARNING: switch off the projector before operating.

Read carefully the lamp builder's instructions.



Screw the two screws off (part.A) and remove the round cover that's supporting the lampholder. Insert the lamp (MSD250/2) in the socket. Insert delicately the lamp in the projector support, driving it with the round cover.

Pay attention: the lampholder's wires must correctly reenter in the projector. Block the cover screwing the screws up.

Wait at least 10 minutes after the projector has been switched off before operating again, in order to let it cool down and avoid the lamp explosion. Wait 20 minutes in case you are operating with bare hands in order to avoid burns.



2.2 LAMP ADJUSTMENT

Lamp adjustment is necessary to obtain a uniform and powerful light beam. Switch on the projector and set the shutter to open, set the color as white. Adjust the three screws (part. B) until you reach the ideal condition between power and homogeneity.

WARNING! The lamp is pre-regulated by the factory. Only fine-adjustment is required. Don't move the screws B up to upper or lower extremities.

2.3 PROJECTOR INSTALLATION



To fix the **MP250 Zoom** is necessary, when the installation has to be on a raised-from-the ground support, to block the fixing bracket of the unit by means of a screw provided with nut and locknut measuring not less than **M10X50**, to insert in the central pre-arranged hole on the fixing bracket.

In order to guarantee a necessary security and in respect of the actual safety rules concerning the projectors' installation, it is compulsory to install a safety-chain (or steel cable), equipped with spring clips, to connect the **MP250 Zoom**'s body to the fixing structure.

ATTENTION: the safety-chain must be properly installed and fixed to the supporting structure, in a way that an incidental giving in of the main bracket would lead to the shortest possible fall of the projector. **After such an intervention the safety-chain must be replaced.**

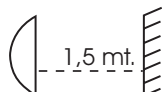
ATTENTION: COEF is not responsible for installations not correctly made or made without respecting the above indications: those installations are considered dangerous.



2.4 ADVICES FOR A CORRECT INSTALLATION

The following conditions have to be respected for a correct operation:

- 1) Do not install the projector outside where the influence of atmospheric factors could damage the unit working (rain, wind, intense heat etc.).
- 2) Do not clean the projector using water jets or immersion in different liquids. Scrupulously follow the indications given in the chapter MAINTENANCE.
- 3) Make the electric connections and the installation / replacement of the lamp after having disconnected the power supply and after having positioned the power switch to OFF.
- 4) Do not touch in any case the internal and external parts of the projector without previous authorization of the constructor and make modifications only by the intervention of qualified staff.
- 5) Make sure that the projector is correctly fixed on the support as indicated in par.2.3.



- 6) **Minimum distance from illuminated objects:** The projector must be positioned in such a way that objects struck by the light beam are located at least 1,5 metres from the projector objective.
- 7) **Minimum distance from inflammable materials:** 0.3 meters
- 8) **MAX ambient temperature:** 40° C.

3.0 POWER SUPPLY CONNECTIONS



Supply the projector by connecting it as indicated in picture

Power supply: 100/120/200/230 V~ 50-60 Hz. Voltage and frequency as indicated on the rear of the projector.

Power absorbed: see table pag. 4



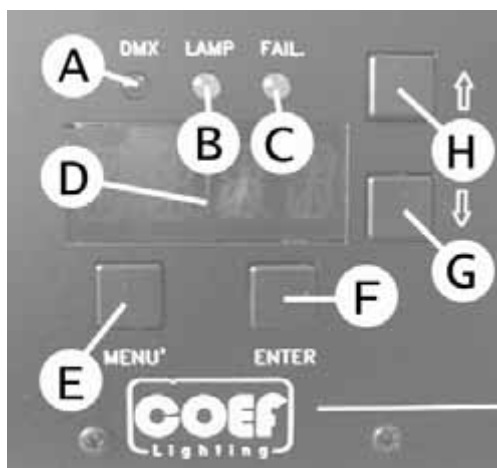
3.1 DMX 512 CONNECTIONS



Connect the projector to the control unit by means of a RG58 or RG59 coaxial cable supplied with 3 Pin XRL Cannon plugs and connectors. Respect, according to the indications on the panel, the input and the output of the DMX 512 signal.



4.0 SPECIAL FUNCTIONS AND PROJECTOR ASSIGNMENT



On the front panel of **MP250 Zoom** you'll find a section for the additional functions and for setting the projector.

Following the picture, you can see all the offered possibilities in detail.

All operations are to be carried out with the **E, F, G, H** buttons, respectively indicated as **MENU, ENTER, DOWN** and **UP**.

The display **D** will inform you about the selected functions.

The 3 **A, B,** and **C** leds will allow you to know:

A = reception of the DMX line.

B = lamp ON.

C = errors indicated on the ERR table.

On switching the projector on, the display will indicate the type of projector and the version of control software which have been installed. To this purpose, please remember that this type of projector belongs to a new generation of projectors, designed with the possibility of updating the software version through the normal DMX connection by means of a programmer deliberately created: **UNI-PROG 8**.

After the indication **MSTR HOME**, the projector carries out the RESET and gets ready to be controlled from the connected console.

The display will indicate 1 as default value. This means that the first channel occupied by the projector will respond to the values sent to channel 1 by the DMX line. This also means that according to the total number of channels assigned to the projector by means of the CH89 function, MISC menu (see Table 4.1 Menu/Fuctions), we shall be able to check the **MP250 Zoom** with the 1 to X channels (8 or 9 according to how the setting is) of the DMX line. This enables us to make **MP250 Zoom** (which we are installing) completely independent from control or integral with any other installed projector.

General Rules:

Refer to the Table of Section 4.1 in the following page.

By each pressure, Button **MENU** (E) permits to go backwards by one level.

G and H (**DOWN** and **UP**) buttons select functions and sub-functions.

Button F (**ENTER**) enters the function and confirms a control.

By pressing Button **MENU** (E) and buttons **UP** and **DOWN** (H and G) you can select the menu you have to modify.

Once the wished menu is reached, press Button F (**ENTER**) to confirm your selection and enter the function.

Press G or H to enter the sub-functions if available.

Always confirm your selection with **ENTER**.

Press **MENU** to go out of the function and press again to go back to the starting level.

Example: We installed our projector on the ceiling and for this reason we want the visualization of the display to be correct.

- Press **MENU**
- Press **H** (UP) 11 times up to "**MISC**"
- Press **ENTER** the Display will show "**RSET**"
- Press **H** (UP) twice up to "**DSPL**"
- Press **ENTER** the Display will show "**ONOF**"
- Press **H** (UP) once up to "**STRV**"
- Press **ENTER** the Display will show "**STND**"; this is the actual configuration state.
- Press **H** (UP) once up to **R.E.V.**; the blinking point indicate the available configuration.
- Press **ENTER** The Display visualization as been rotated to 180°.
- Press **MENU** 4 times to return to starting MENU.

The indication of the display will automatically come back after 120 sec. and inform on the set starting channel DMX. **If we are now in a sub-function, this automatic device will not assume control.**

4.1 MENU, FUNCTION & SUB-FUNCTION

MENU	FUNCTION	SUB-FUNCTION	DESCRIPTION
DMX	(*) 1 / 255		DMX start channel
TIME	LAMP	SHOW - KH, H	Lamp working hours (KH=thousands H=hours)
		RESET - GO?	Lamp working hours reset (confirm by ENTER)
	MACH	SHOW - KH, H	Projector working hours (KH=thousands H=hours)
ERR	E OK		NO ERROR
	E110		EEPROM failure
	E210		Malfunction of the SHUTTER motor
	E220		Malfunction of the COLOR motor/sensor
	E230		Malfunction of the GOBOS motor/sensor
	E240		Malfunction of the GOBOS ROT. motor/sensor
	E250		Malfunction of the PAN motor/sensor
	E260		Malfunction of the TILT motor/sensor
	E510		Malfunction of the PAN Encoder
	E260		Malfunction of the TILT Encoder
	W310		Checksum Setup not valid
	W410		Lamp working hours for more than 1900 hours.
SHUT	HOME		HOME SHUTTER
	TEST		TEST SHUTTER
COL	HOME		HOME COLOR
	TEST		TEST COLOR
	CSHUT	(*) OFF / ON	Color change in black-out position
	MODE	(*) MOD1 / MOD2	Color switching or linear wheel motion.
GOBO	HOME		HOME GOBOS
	TEST		TEST GOBOS
	GSHUT	(*) OFF / ON	GOBO change in black-out position
RGOB	HOME		HOME GOBOS rotation
	TEST		TEST GOBOS rotation
PAN	HOME		HOME PAN movement
	TEST		TEST PAN movement
	STRV	(*) STND / REV	Switch movement direction (DX / SX)
	ENCO	(*) ON / OFF	ON/OFF the automatic repositioning of the PAN
TILT	HOME		HOME TILT movement
	TEST		TEST TILT movement
	STRV	(*) STND / REV	Switch movement direction (UP / DOWN)
	ENCO	(*) ON / OFF	ON/OFF the automatic repositioning of the TILT
SCH	da CH1 a CH9	0 / 255	DMX value for the indicated channel
LAMP	ONOF	ON	LAMP ON
		OFF	LAMP OFF
		AUTO	LAMP OFF after 1 hour of no change on DMX
	CDMX	(*) NO / YES	LAMP switching on by DMX control
MISC	RSET		MASTER HOME (Starting RESET)
	RDMX	(*) YES / NO	MASTER HOME via DMX control
	DSPL	(*) ON / OFF	Display on / Display off
		(*) STND / REV	180° rotation of the visualization display
	SWPT	(*) STND / SWAP	Channel control switch PAN / TILT
	CH 8/9	(*) CH 8 / CH 9	Projector control (8 or 9 channels)
	VER		Show the installed software version

(*) default value- factory assigned

5.0 CHANNELS AND DIGITAL VALUES

CH	8 CHANNELS	9 CHANNELS
1	SHUTTER / STROBE / DIMMER 0-5 SHUTTER closed 6-100 DIMMER Adjustment 101-110 DIMMER 0 > 100% Automatic 6 sec. 111-120 DIMMER 100% > 0 Automatic 6 sec. 121-126 DIMMER 0 > 100% slow Faster shut down 127-132 DIMMER 0 > 100% middle Faster shut down 133-138 DIMMER 0 > 100% fast Faster shut down 139-144 DIMMER 100% > 0 slow Faster open 145-150 DIMMER 100% > 0 middle Faster open 151-156 DIMMER 100% > 0 fast Faster open 157-162 Dimmer 0 > 100% > 0 slow 163-168 Dimmer 0 > 100% > 0 middle 169-174 Dimmer 0 > 100% > 0 fast 175-180 Strobe lamp from 1 to 6 random [reg. 0.0-0.5 sec.] 181-186 Strobe lamp from 1 to 6 random [reg. 0.6-1.5 sec.] 187-192 Strobe lamp from 1 to 6 random [reg. 1.6-2.5 sec.] 193-250 STROBE Speed adjustment 251-255 SHUTTER open	SHUTTER / STROBE / DIMMER 0-5 SHUTTER closed 6-100 DIMMER from channel 9 value 101-110 DIMMER 0 > 100% Automatic 6 sec. 111-120 DIMMER 100% > 0 Automatic 6 sec. 121-126 DIMMER 0 > 100% slow Faster shut down 127-132 DIMMER 0 > 100% middle Faster shut down 133-138 DIMMER 0 > 100% fast Faster shut down 139-144 DIMMER 100% > 0 slow Faster open 145-150 DIMMER 100% > 0 middle Faster open 151-156 DIMMER 100% > 0 fast Faster open 157-162 Dimmer 0 > 100% > 0 slow 163-168 Dimmer 0 > 100% > 0 middle 169-174 Dimmer 0 > 100% > 0 fast 175-180 Strobe lamp from 1 to 6 random [reg. 0.0-0.5 sec.] 181-186 Strobe lamp from 1 to 6 random [reg. 0.6-1.5 sec.] 187-192 Strobe lamp from 1 to 6 random [reg. 1.6-2.5 sec.] 193-250 STROBE Speed adjustment 251-255 SHUTTER open
	COLOR MODE 1 0 - 5 Neutral 6 - 15 Yellow 16 - 25 Blue 26 - 35 Magenta 36 - 45 Green light 46 - 55 Orange 56 - 65 Cyano 66 - 75 Pink 76 - 85 Red 86 - 95 Blu light 96 - 105 Green 106 - 115 Wood 116 - 125 White-Yellow 126 - 135 Yellow-Blue 136 - 145 Blue-Magenta 146 - 155 Green light-Orange 156 - 165 Orange-Cyano 166 - 175 Cyano-Pink 176 - 185 Red-Blue light 186 - 195 Blue light-Green 196 - 200 Random full-color (slow) 201 - 205 Random full-color (fast) 206 - 230 CW Rotation adjustment 231 - 255 CCW Rotation adjustment	COLOR MODE 1 0 - 5 Neutral 6 - 15 Yellow 16 - 25 Blue 26 - 35 Magenta 36 - 45 Green light 46 - 55 Orange 56 - 65 Cyano 66 - 75 Pink 76 - 85 Red 86 - 95 Blu light 96 - 105 Green 106 - 115 Wood 116 - 125 White-Yellow 126 - 135 Yellow-Blue 136 - 145 Blue-Magenta 146 - 155 Green light-Orange 156 - 165 Orange-Cyano 166 - 175 Cyano-Pink 176 - 185 Red-Blue light 186 - 195 Blue light-Green 196 - 200 Random full-color (slow) 201 - 205 Random full-color (fast) 206 - 230 CW Rotation adjustment 231 - 255 CCW Rotation adjustment
2	COLOR MODE 2 0 - 5 Neutral 6 - 10 Yellow 11 - 15 Blue 16 - 20 Magenta 21 - 25 Green light 26 - 30 Orange 31 - 35 Cyano 36 - 40 Pink 41 - 45 Red 46 - 50 Blu light 51 - 55 Green 56 - 60 Wood 61 - 180 Positioning 181 - 185 Random fast 186 - 190 Random middle 191 - 195 Random slow 196 - 200 Random very slow 201 - 215 Random very fast 216 - 235 CW Rotation adjustment 236 - 255 CCW Rotation adjustment	COLOR MODE 2 0 - 5 Neutral 6 - 10 Yellow 11 - 15 Blue 16 - 20 Magenta 21 - 25 Green light 26 - 30 Orange 31 - 35 Cyano 36 - 40 Pink 41 - 45 Red 46 - 50 Blu light 51 - 55 Green 56 - 60 Wood 61 - 180 Positioning 181 - 185 Random fast 186 - 190 Random middle 191 - 195 Random slow 196 - 200 Random very slow 201 - 215 Random very fast 216 - 235 CW Rotation adjustment 236 - 255 CCW Rotation adjustment

8 CHANNELS		9 CHANNELS	
CH	GOBOS	GOBOS	
	0 - 10 Neutral	0 - 10 Neutral	
3	11 - 20 GOBO 1	11 - 20 GOBO 1	chann.4 controls rotation
	21 - 30 GOBO 2	21 - 30 GOBO 2	chann.4 controls rotation
	31 - 40 GOBO 3	31 - 40 GOBO 3	chann.4 controls rotation
	41 - 50 GOBO 4	41 - 50 GOBO 4	chann.4 controls rotation
	51 - 60 Reduction	51 - 60 Reduction	
	61 - 70 GOBO 5	61 - 70 GOBO 5	chann.4 controls rotation
	71 - 80 GOBO 6	71 - 80 GOBO 6	chann.4 controls rotation
	81 - 90 GOBO 7	81 - 90 GOBO 7	chann.4 controls rotation
	91 - 100 GOBO 8	91 - 100 GOBO 8	chann.4 controls rotation
	101 - 110 GOBO 1	101 - 110 GOBO 1	chann.4 controls position
	111 - 120 GOBO 2	111 - 120 GOBO 2	chann.4 controls position
	121 - 130 GOBO 3	121 - 130 GOBO 3	chann.4 controls position
	131 - 140 GOBO 4	131 - 140 GOBO 4	chann.4 controls position
	141 - 150 GOBO 5	141 - 150 GOBO 5	chann.4 controls position
	151 - 160 GOBO 6	151 - 160 GOBO 6	chann.4 controls position
	161 - 170 GOBO 7	161 - 170 GOBO 7	chann.4 controls position
	171 - 180 GOBO 8	171 - 180 GOBO 8	chann.4 controls position
	181 - 193 GOBOS Fast random	181 - 193 GOBOS Fast random	
	194 - 205 GOBOS Slow random	194 - 205 GOBOS Slow random	
	206 - 230 CW Rotation adjustment	206 - 230 CW Rotation adjustment	
	231 - 255 CCW Rotation adjustment	231 - 255 CCW Rotation adjustment	
4	GOBOS ROTATION	GOBOS ROTATION	
	0 - 5 STOP	0 - 5 STOP	
	6 - 255 From 0 to 540° GOBO positioning	6 - 255 From 0 to 540° GOBO positioning	
	6 - 130 CW Rotation adjustment of the GOBO	6 - 130 CW Rotation adjustment of the GOBO	
	131 - 255 CCW Rotation adjustment of the GOBO	131 - 255 CCW Rotation adjustment of the GOBO	
5	PAN MOVEMENT	PAN MOVEMENT	
6	PAN MOVEMENT FINE ADJUSTMENT	PAN MOVEMENT FINE ADJUSTMENT	
7	TILT MOVEMENT	TILT MOVEMENT	
8	TILT MOVEMENT FINE ADJUSTMENT	TILT MOVEMENT FINE ADJUSTMENT	
9		DIMMER	
		0 - 10 DIMMER CLOSED 11 - 250 DIMMER Adjustment 251 - 255 DIMMER OPEN	
		WARNING : position CHANNEL 1 at a value between 6 and 100, in order to control DIMMER with this channel.	

SPECIAL ACTION

When the lamp control via DMX (CDMX) and the RDMX function have been activated in the configuration menu, it's possible, by a combination of the channels values, to control the lamp switch ON/OFF or to allow the projector MASTER RESET.

Lamp ON via DMX:

CHANNEL 2 = value 0

CHANNEL 3 and CHANNEL 4 = value 0 > 255 > 0

Lamp OFF via DMX:

CHANNEL 2 = value 255

CHANNEL 3 and CHANNEL 4 = value 0 > 255 > 0

MASTER RESET:

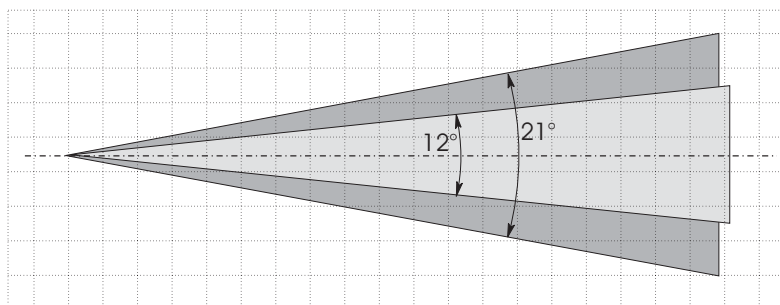
CHANNEL 1 = value 0

CHANNEL 2 and CHANNEL 3 = value 0 > 255 > 0

6.0 FOCUS ADJUSTMENT



7.0 ZOOM ADJUSTMENT



The width of the light beam of the **MP250 Zoom** is adjustable between 12° and 21° by means of the knob located on the front part of the projector and indicated with the writing **ZOOM**.

Position your projector and adjust this knob in order to obtain the desired beam width.

Do not force your adjustment beyond the upper and lower limits of the available stroke.

8.0 GOBOS REPLACEMENT

WARNING: switch off the projector before operating



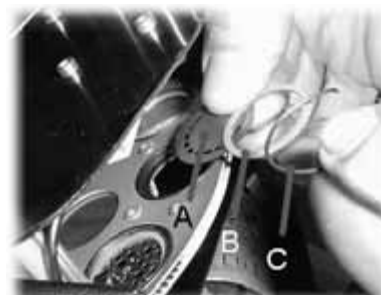
Open the cover of the **MP250 Zoom** first, by means of the 4 release-screws which hold it to the frame.



The gobo-wheel contains both steel gobos and dichroic gobos. They are interchangeable simply by removing the little elastic ring with a screw-driver (see figure).

In order to replace a dichroic gobo with a steel gobo, put a thick ring between the gobo and the elastic ring (see part. B).

Insert the chosen gobo and place again the steel ring, paying attention that it reaches its correct position.



9.0 ORDINARY MAINTENANCE

The ordinary maintenance is fundamental for the perfect efficiency of **MP250 Zoom**, in order to prevent any functional defect as a reduced light beam or irregularities in the movement of the projector or of other rotating parts.

The parts which need more maintenance are shown in the figures. In order to free them from dust or grease, clean them with a soft cloth and normal products for windows cleaning.



9.1 EXTRAORDINARY MAINTENANCE

To make an extraordinary maintenance, it is necessary the presence of a generic or qualified mechanical operator, according to the type of the needed intervention. To let you operate more easily, we advice you to remove the two top covers of **MP250 Zoom** and the two basis covers. In this way it will be much more easy to observe the components to maintain and/or replace. In the following figures it's possible to observe the different parts that have to be cleaned and, at the same time, the whole mechanical structure mounted with all its components is shown.



You must particularly take care of the sensors which are really fundamental in the unit working.

The sensors are absolutely necessary when a general reset of the projector is needed. If this function is not correctly executed, it will totally compromise the regular working of the projector, at least for the group referred to the sensor itself.

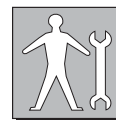
Es : when there's an irregular reset of the color wheel, all the settled colors will not correspond to the colours listed in the chapter about DMX digital values.

The same situation will occur in the case of the gobos wheel .

The section shutter/strobo doesn't use sensors during the reset positioning but it's conditioned by a mechanical beat of the shutter shovels.



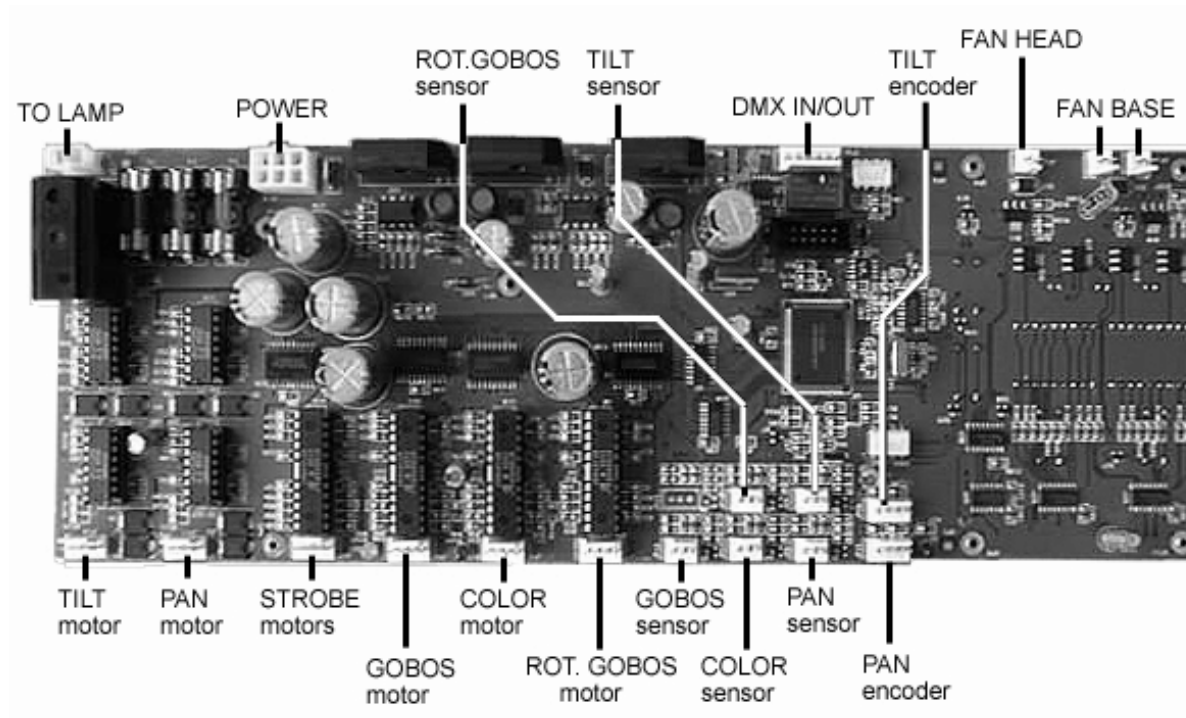
9.2 ELECTRONIC MAINTENANCE



This section is dedicated in detail to the electronic connections between the card and the mechanical components, assembled in the projector. These informations will be absolutely necessary when the mechanical unit has to be removed from the projector for maintenance and/or repair.

The connections are made using handy connectors and are detailed where you can find indications about the connection between a specific connector and a specific component of the mechanical unit. This includes the motors and the sensors of the various effects wheels (color, gobos, shutter etc.).

WARNING! An improper use of this documentation made by not specifically qualified staff can damage irretrievably the electronic and/or mechanical components of the projector.



10.0 TROUBLESHOOTING

	PROBLEM	CAUSE	ACTION
	The projector doesn't switch on	- The power supply is not present	Check if the luminous indicator is lighted or not.
		- The lamp is not working	Replace the lamp.
	The projector switches on but doesn't answer to commands	- Wrong DMX configuration	Make sure that the projector is correctly configured.
		- Defective cables	Replace or repair the DMX cable.
		- Defective control unit	Chek the control unit by means of other working projectors.
			Technical aid is required.
	Defecting projection	- The lens is broken	Ceck that the lens are not broken.
		- Dust or grease stored on lenses	Remove dust or grease stored on lenses.
	Projection with halo	- Not aligned Lamp	Lamp adjustment (see 2.2 chapter)
		- Dust or grease stored on the all parts of projector.	Carefully clean the optical group lenses and the projector components (see "Main-tenance" chapter)
	The color or other effects doesn't coincide to the selected value.	- Position sensor dirty with dust or grease	Carefully clean the optical group lenses and the projector components (see "Main-tenance" chapter)
		- Defective Motor	
		- Electronic board	Technical aid is required.
	The PAN movement doesn't coincide to the selected value	- Position sensor dirty with dust or grease	Carefully clean the optical group lenses and the projector components (see "Main-tenance" chapter)
		- Defective Motor	
		- Electronic board	Technical aid is required.
	The projector does not carry out the automatic repositioning of the PAN or TILT movements.	- ENCO OFF in the PAN/TILT configuration menu	Set ON ENCO Function of PAN/TILT configuration MENU (cap. 4.1)
			Technical aid is required.

Declaration of CE Conformity

We, Manufacturer/Importer

COEF SRL.

Via Albinatico, 80-82
51019 Ponte Buggianese (Pistoia)
ITALY

Declare that the product

MP250 ZOOM

Is in conformity with

In accordance with **89/336 EEC-EMC** Directive and
With the actual required safety standards in accordance with LVD 73/23 EEC

Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) high frequency equipment

Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment

Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus

Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaires

■ **EN 55022**

Limits and methods of measurement of radio disturbance characteristics of information technology equipment

Immunity from radio interference of broadcast receivers and associated equipment

Cabled distribution systems; Equipment for receiving and/or distribution from sound and television signals

■ **EN 60065**

Safety requirements for mains operated electronic and related apparatus for household and similar general use

Safety of household and similar electrical appliances

■ **EN 61000-3-3**

Disturbances in supply systems caused by household appliances and similar electrical equipment "Harmonics"

Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"

Generic emission standard Part 1:
Residual, commercial and light industry

Generic immunity standard Part 1:
Residual, commercial and light industry

Generic emission standard Part 2:
Industrial environment

Generic immunity standard Part 2:
Industrial environment

Immunity requirements for household appliances, tools and similar apparatus

■ **EN 61547**

Equipment for general lighting purposes (immunity)

■ **EN 60598-1**

Light fixtures
General instructions and tests

■ **EN 60598-2-17**

Light fixtures. General instructions and tests. Equipment fixtures for stages, TV and cinema studios

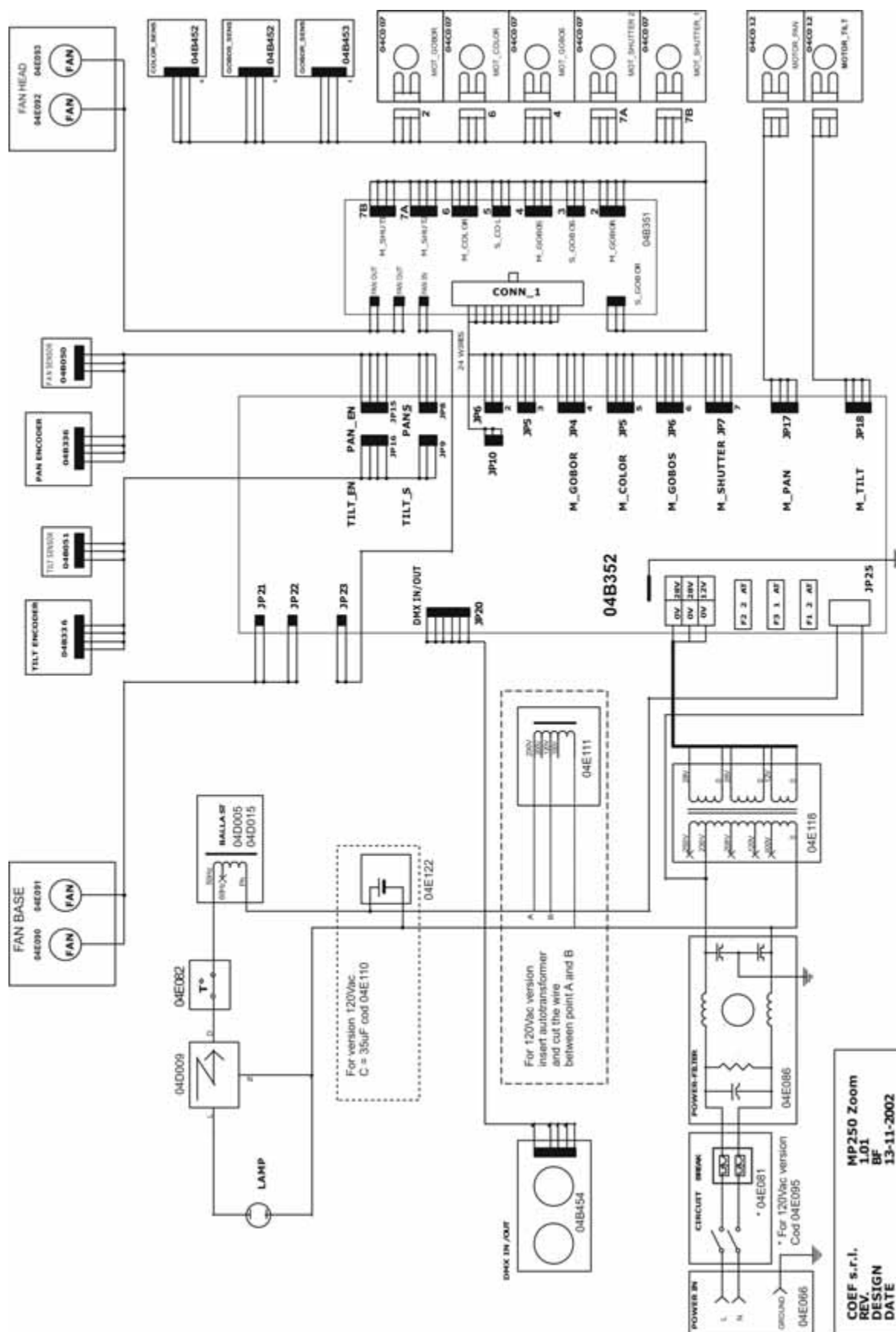
Date: Ponte Buggianese, 26 July 2000

Name: Alfonso Ceccarelli
Position: Managing Director

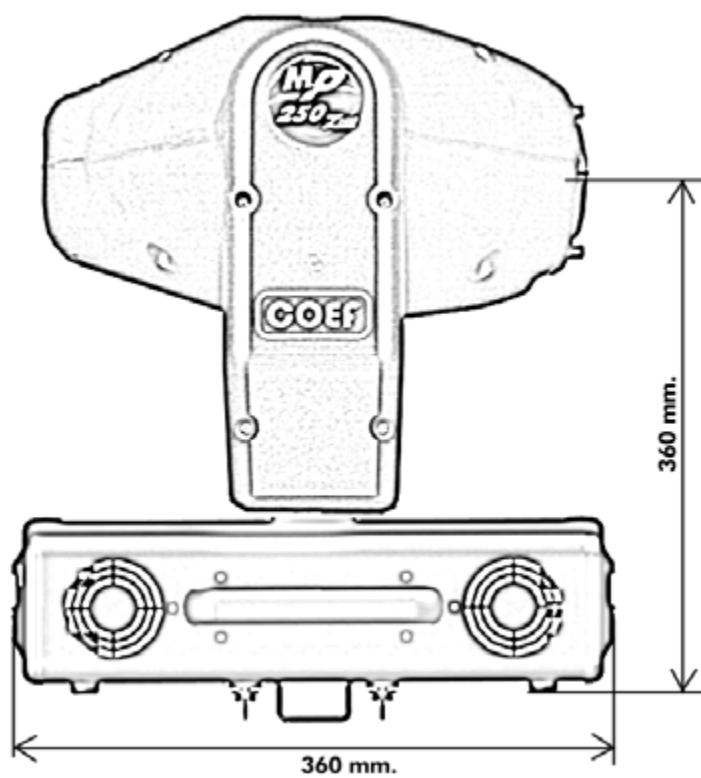
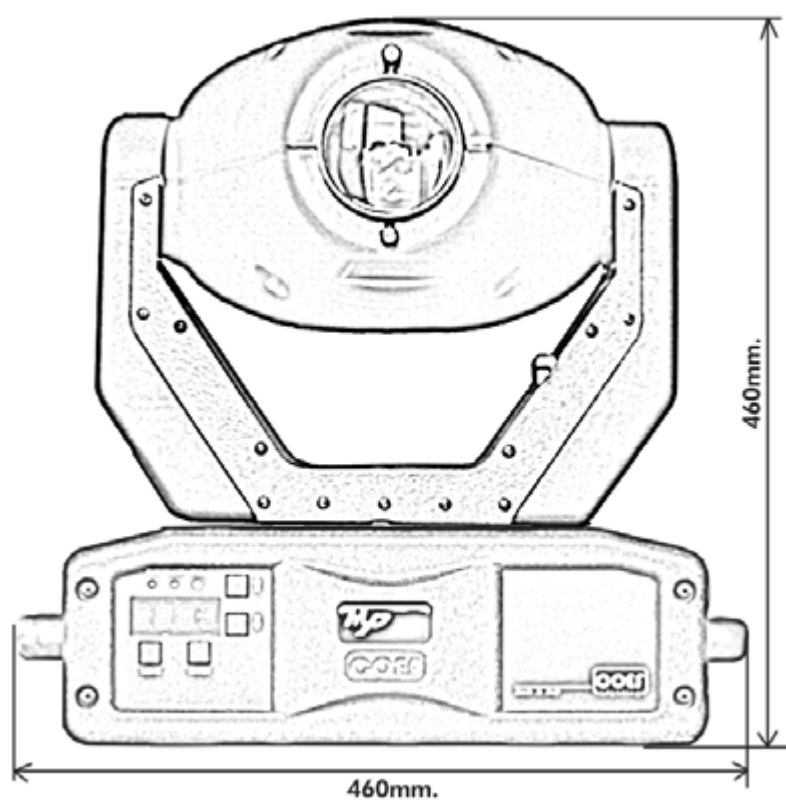
Signature:



12.0 ELECTRIC DIAGRAM



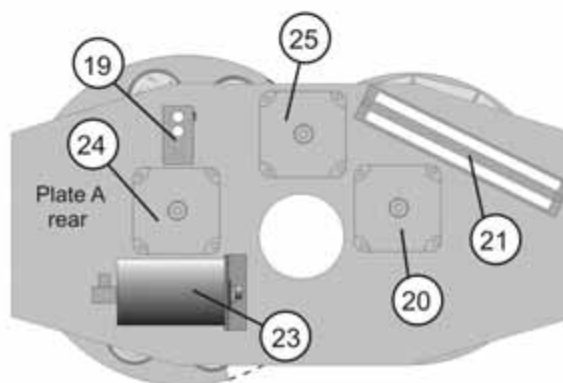
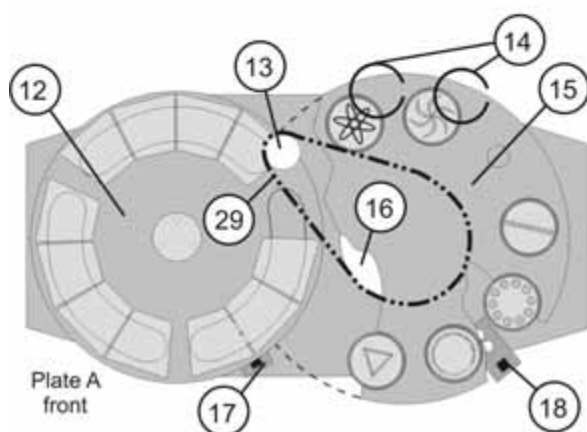
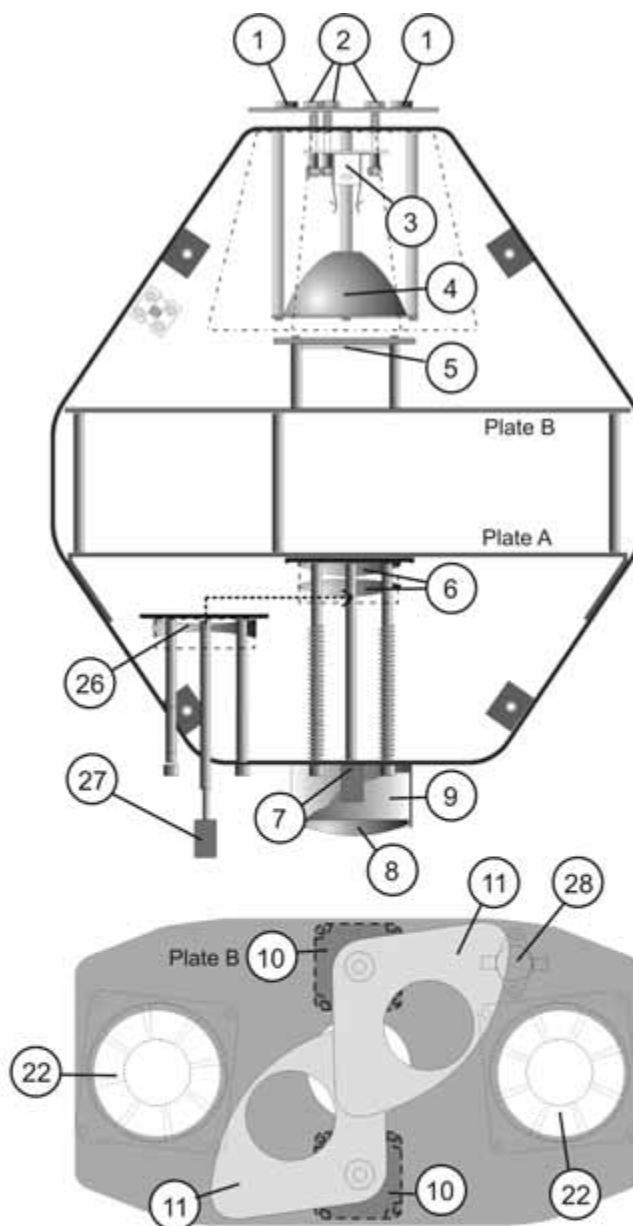
13.0 DIMENSIONS



14.0 PART ASSEMBLY

Tav. MP250Z - 1
MP 250 Zoom - Part assembly

1	Screws for lamp-panel
2	Adjustment screws for a light beam uniformity
3	Lampholder
4	Elliptic reflector
5	Anti-heat filter
6	Condenser lens
7	Screw for focus adjustment
8	Objective lens
9	Objective
10	Shutter / Strobe / Dimmer motor
11	Shutter / Strobe / Dimmer blade
12	Colors wheel
13	Rotating gobos pinion
14	Gobos locking spring
15	Gobos wheel
16	Rotating gobos pulley
17	Optical sensor for color wheel
18	Optical sensor for gobos wheel
19	Optical sensor for rotating gobos position
20	Motor for color wheel
21	Motors connectors box
22	Fan
23	Igniter
24	Motors for gobos change
25	Motor for gobos rotation
26	Zoom lens
27	Screw for zoom adjustment
28	Safety thermic switch
29	OR ring
	NOTE



Tav. MP250Z - 2

MP 250 ZOOM - Base & Arm Part assembly

1	Power Switch
2	Power Outlet
3	DMX IN-OUT Board
4	Power factor correcting capacitors
5	Ballast
6	Fan
7	Handspike
8	AC-filter
9	Pan rotary stopper
10	Pan reset - Optical sensor
11	Pan - ball bearing
12	Pan Driving belt
13	Pan movement motor
14	Transformer for electronic equipment
15	Electronic board
16	Head arm
17	Tilt movement gear
18	Tilt movement motor
19	Tilt Driving belt
20	Tilt movement pinion
21	Encoder PAN sensor
22	Encoder PAN disc
23	Encoder TILT sensor
24	Encoder TILT disc
25	Cover
Note:	

